

Reprint

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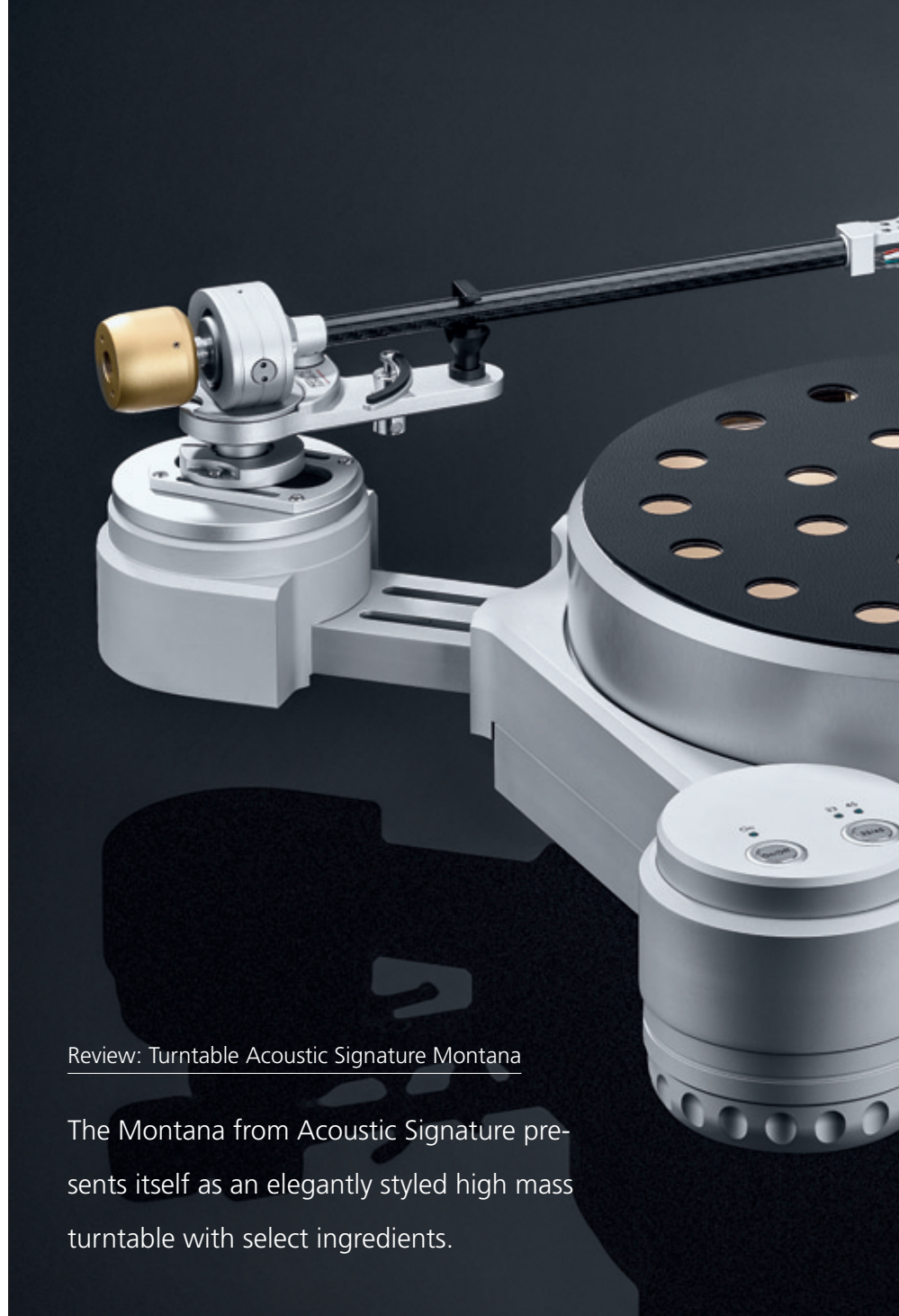
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& records

Das Magazin für
hochwertige Musikkwiedergabe

Acoustic Signature Montana:
Wavebreaker

One thing should be obvious with the turntables made by Acoustic Signature: they are not exactly fragile. And still Gunther Frohnhöfer would not even dream of exposing his fully assembled creations to a bumpy transportation. Hence every item is set up and adjusted on-site by specially trained employees or retailers; in our case this was done by the company boss himself. In the portfolio of eleven turntable models the Montana ranks just below the reference trio and features already the essential key technologies of the house. Without a doubt, the mass concept that is strictly adhered to by Acoustic Signature, has been implemented here consistently with a total weight of 41 kilograms (90.5 pounds), and yet the turntable will find its place on normal sized hi-fi furniture. Moreover, elevated tonearm bases and pylons give its elegant look a certain lightness. The two front pylon feet handle the correct chassis alignment, whereby their threads allow an ultra fine height adjustment and, due to their butter-soft ease of operation, deliver proof of the quality workmanship of the machine.

The new Acoustic Signature comes standard equipped with two tonearm bases to be chosen by the customer which allow an adaptation to all specific tonearm parameters and are therefore suitable for any length. On the other hand, a variable adjustment of the VTA is not possible because despite of his passion for detail, Gunther Frohnhöfer considers an adjustment to 180-gram LPs as definitely over the top. The bases on our test candidate are fitted with the 9-inch TA 7000 arm (9,999 euros) and its 12-inch sibling TA 5000 (5,750 euros). Both models are gimballed and feature dampened carbon pipes; on the TA 7000 the damping is provided by an inner pipe. In addition their brass counterbalances are secured by grub screws to prevent them from oscillating due to tonearm vibrations. Moreover, with the MCX-4 (2,099 euros) mounted on the TA 7000 and the MCX-2 offered for 799 euros, preference



Review: Turntable Acoustic Signature Montana

The Montana from Acoustic Signature presents itself as an elegantly styled high mass turntable with select ingredients.

was given to MC systems of the MCX series introduced in 2018. Their shells have been developed by Acoustic Signature themselves and are manufactured in-house, the generator systems come from Ortofon. Gunther Frohnhöfer, however, has stated his own specifications to achieve a slightly warmer timbre. True, in a side-by-side comparison the TA 5000 / MCX-2 combination cannot really compete with the tonal finesse and focus of the TA 7000 / MCX-4 duo, but proves to be a very interesting tandem

with great potential, not only because of its price-performance ratio.

The included DMC2+ motor control works digitally, feeding the motor supply voltage through one ethernet cable per phase to the drive; in addition, the phase is continuously monitored and, if necessary, readjusted. Initially the maximum voltage is provided to bring the heavy platter to nominal rotation speed within nine seconds, later the DMC2+ lowers the voltage to the required minimum. Built into the 7 cm (2.75 in.) thick alu-



lations. These act upon the platter, which in turn reflects them. Gunther Frohnhöfer counters this fundamental problem with so-called »Silencers«: brass cylinders which are pressed into concentrically arranged bores to act like breakwaters. Thus they also neutralise inherent resonances of the platter and make it immune to structure-borne sound.

Besides the efficient resonance optimisation of his components, Gunther Frohnhöfer has always paid special attention to the bearing construction of his turntables. For him it was quite obvious right from the start that inverted bearings were not an option because they would move the axle's pivot in the bearing clearance – and thus a source of noise – closer to the record. However, in his opinion every conventionally lubricated bearing reveals one weak spot: due to its tiny support point and the heavy platter, the bearing ball exerts an enormous pressure on the bearing bottom, squeezing out the lubricant below it. This is why Frohnhöfer designed a bearing with a bottom made of Tidorfolon. This in-house developed, abrasion-proof alloy consists of titanium, vanadium, polytetrafluorethylen and fillers which, together with the plastic matter, deposit a certain quantity of lubricant. The bearing bushing is made of aged sinter bronze and soaked in a hot oil bath. There the porous material absorbs oil which, during the cooling phase, builds an ultra thin film that will not drain off on the inside of the bushing – which is why the bearing can do without extra lubrication. The bushing is embedded in an aluminium enclosure and guides the axle only in the upper and lower zone to minimise friction.

Among the interpretations I've come to known, the Reference Recordings edi-

minium frame are three synchronous motors the pulleys of which each transmit the torque by means of a round belt. That way a constant distribution of the driving forces and an optimum control of the massive, cone-shaped aluminium sub-platter are achieved. The 14 kilo

(30.86 lbs) platter is also made of aluminium and dampened with bitumen on its underside. But as Acoustic Signature states, this still isn't enough to suppress all unwanted resonances, because the scanning process itself sets the pick-up and the record into mechanical oscil-

Wavebreaker



Acoustic Signature has equipped the Montana with two tonearms, the 9-inch TA 7000 (front of picture) and the 12-inch TA 5000. Righthand page: the triple motor drive and the »Silencer« platter inserts.

tion of Stravinsky's »Firebird Suite« featuring the Minnesota Orchestra under the baton of Eiji Oue is the one which devotes particular attention to the furiously dramatic nature of the opus. Already during the introductory pianissimo the Montana underscores in a most impressive way that it is bound to create an ideal frame for this: when double basses, celli and tympani come in so very delicately, the air is sizzling with energy, the

tension is literally palpable. Indeed, the instruments stand out already with sharp contours against a pitch-black backdrop; at the same time a credible impression of the stage depth is evoked – this is nothing short of phenomenal. It was foreseeable that the Montana would effortlessly release the explosive force of the orchestra in forte passages and sovereignly put its mass in the balance in the abyssal registers; and still it's a thrilling

event being a witness of it, for the Montana places the tympani into the room with downright breathtaking impact. And yet it seems as if it had only exhaled shallowly, the sound image remains accurately positioned and as solid as carved in stone.

After this experience I simply couldn't resist the luring temptations of various albums by Kraftwerk, but let me just tell you this much about it: never before had I heard such a controlled low-end, at the same time so rich in nuances, and such an almost boundlessly widened, three-dimensional room imaging on »Metall auf Metall« (»The Mix«). The sound quality, realised by the avantgarde artists from Düsseldorf nearly thirty years ago, would be a great credit for quite a few contemporary productions. On the other hand, Yello's album »Touch« ranks among the finest pop productions of the past ten years; moreover, its pressing on vinyl is really wonderful. Now as the track »Bostich (Reflected)« is being played, the Montana goes about it in a tremendously agile way, performing the break beats and staccato-like melody snippets with an extremely concise sense of rhythm and marvellous nimbleness like certainly only few high-mass drives can do.

The »Tone Poet Audiophile Vinyl« collection is a series of albums with analog remastering, compiled by Blue Note on the occasion of its 80th anniversary. The compilation job was entrusted to »sound poet« Joe Harley, a co-founder of the Music Matters vinyl label. One of the fif-

Acoustic Signature Montana

WxHxD	43 x 16 x 43 cm
Warranty*	2 years
Price	19.999 euros
Distribution	AS-Distribution GmbH Hillenbrandstraße 10 73079 Sößen
Phone	0049 71 62 947 44 50

* Bearing: 10 years



teen productions that were selected for their artistic merit and the quality of the original recordings, is the album »Glamoured« by Cassandra Wilson which I have gotten highly familiar with over time. And still the Montana was able

to bring my favourite song »Fragile« even closer to me emotionally. But this didn't happen because it was placing both the instruments and the singer in the correct proportions on stage; not even a vocal rendering, which may un-

conditionally be called natural, seems to be responsible for this. It's rather the ability of this drive to fully illuminate the intimacy and density of the atmosphere on »Fragile« which provokes an emotion of immediate attachment to the acoustic events – hats off to Gunther Frohnhöfer!



Result

The quality craftsmanship of the Montana is unimpeachable, the same applies to its sound potential: the Acoustic Signature merges exemplary sovereignty with an utterly agile, rhythmically accentuated style of play. Moreover, it unfurls an exceptionally finely graduated magnificent tonal spectrum, sketching a three-dimensional stage with credible dimensions. But above all it can distinguish itself as a master of atmospheric representation – a turntable to dream of!

Marius Donadello ■